

Claims:

1. An optical fiber terminator package including:

5 a) a semiconductor chip having a top surface and a bottom surface and including at least one first optical device which emits or receives electromagnetic radiation at one or more wavelengths from the top surface;

10 b) a first hollow cap having a central portion and a first perimeter wall extending from the perimeter edge of the central portion with the free edge of the first perimeter wall bonded to the top surface to provide a first cavity which, in plan view, overlays at least part or all of at least one light emitting device, said central portion including:

at least one region which is at least substantially transparent or translucent to electromagnetic radiation at said one or more wavelengths; and

wherein the first cap has been bonded to the semiconductor chip at the wafer stage

15 prior to separation of the wafer into individual packages.

2. The package of claim 1 wherein the cap further includes at least one first attachment means for attaching an electromagnetic radiation transmitting cable or fiber to the cap, whereby at least some electromagnetic radiation transmitted between the at least one first optical device and the cable or fiber passes through said at least one region.

25 3. The package of claim 1 wherein the semiconductor chip includes at least one second optical device which emits or receives electromagnetic radiation at one or more wavelengths from the top surface

4. The package of claim 4 wherein the cap further includes at least one second attachment means for attaching an electromagnetic radiation transmitting cable or fiber to the cap, whereby at least some electromagnetic radiation transmitted between the at least one second optical device and the cable or fiber passes through said at least one region.

30 5. The package of claim 1 further including a second perimeter wall extending from the periphery of the central portion away from the first perimeter wall.

6. The package of claim 1 further including at least one recess in the central portion.
7. The package of claim 1 further including a second cap bonded to the bottom surface of the chip.
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8. The package of claim 1 wherein the first optical device is a light emitting device.
9. The package of claim 1 wherein the first optical device is a photoreceptor.
10. 10. The package of claim 1 further including a second cap bonded to the bottom surface of the chip, said second cap, in plan view, overlaying at least part or all of at least one first optical device.
11. The package of claim 1 wherein the at least one region refracts said electromagnetic radiation passing therethrough.
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12. The package of claim 1 wherein the at least second region refracts said electromagnetic radiation passing therethrough.